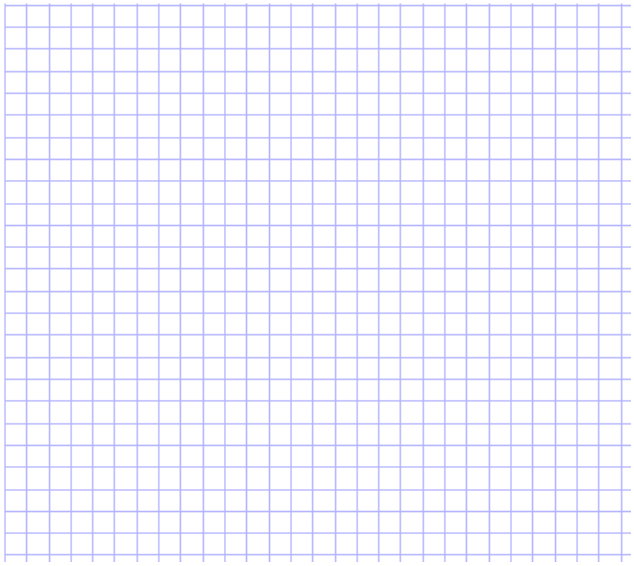
Algebra M7 Distance, Midpoint, Slope
Mrs. Miller

For each of the following pairs of points:

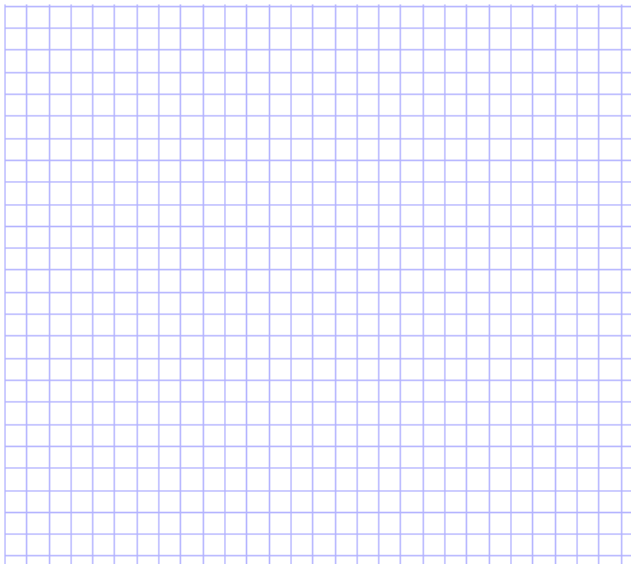
- Graph the ordered pair and draw the segment formed by the two points
- Find the midpoint of the segment
- Determine the length of the segment. Draw the right triangle that helps you to find the distance between the two points.
- Extend the segment to form a line
- Find the slope of the line
- Use the slope and the endpoints to fine two more points that will be on the line
- Write a statement about how the change in y corresponds to the change in x

Example: $(-4,\ 7)\ and\ (6,-2)$

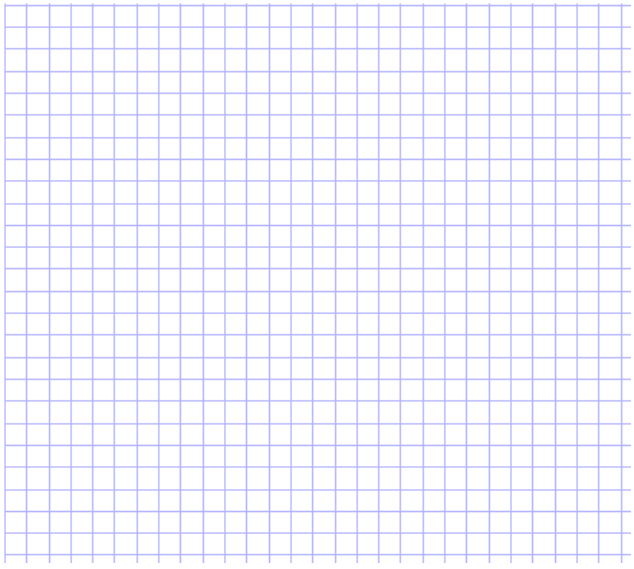


Use the format modeled above for the rest of your problems. To receive full credit you must justify your work.

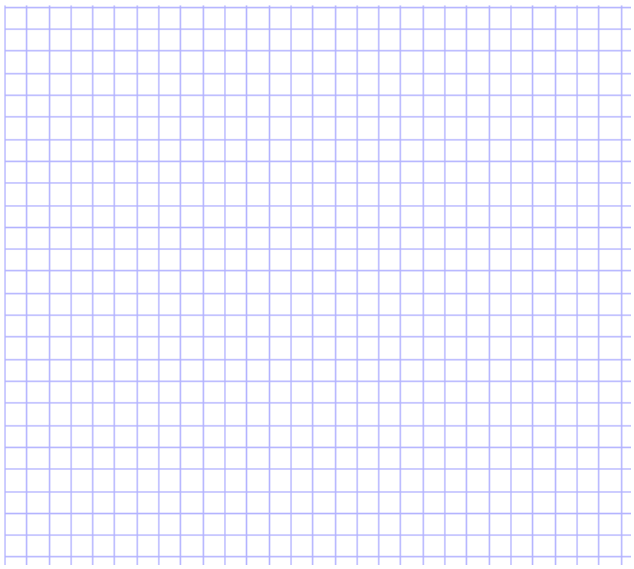
1) $(2,\ 5)\ and\ (6, 13)$



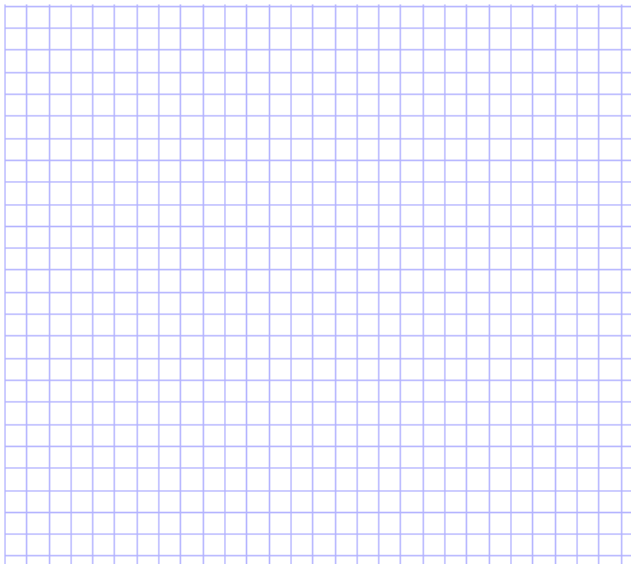
2) $(2, -4)\ and\ (-3,\ 7)$



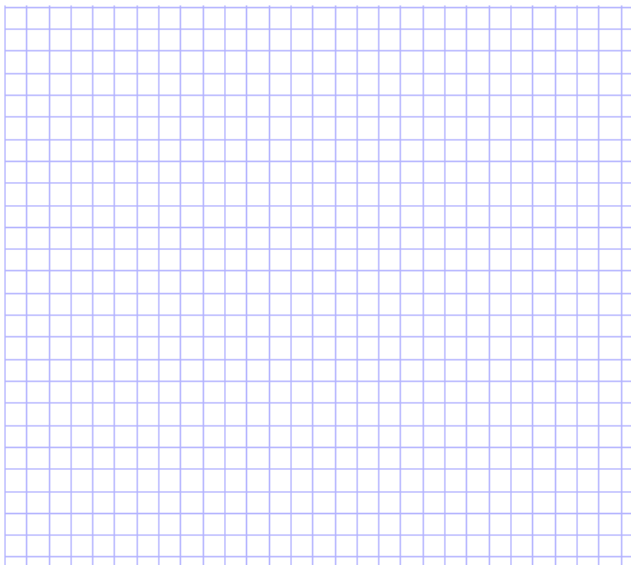
3) $(-4,\ 5)\ and\ (6, 5)$



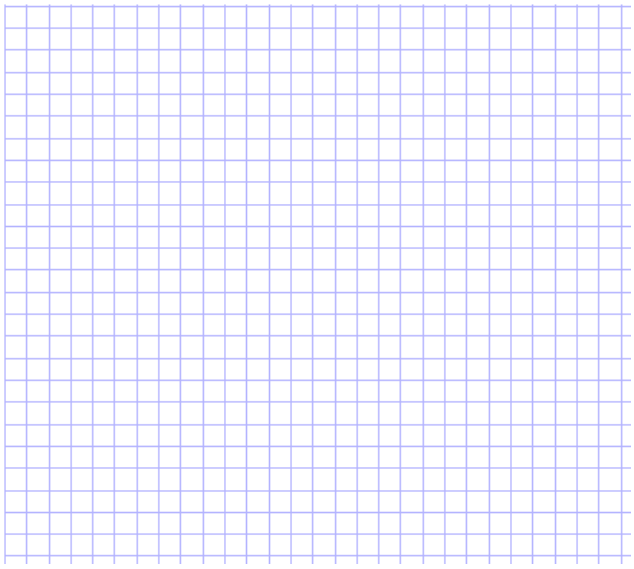
4) $(13,\ 5)\ and\ (-2, 13)$



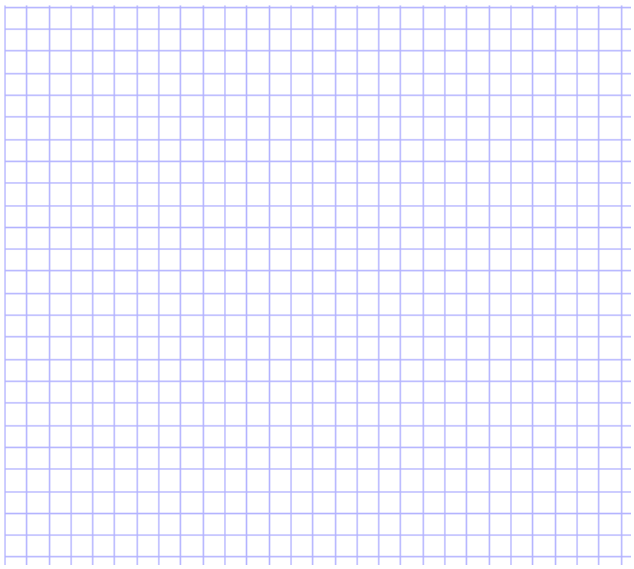
5) $(5,\ 5)\ and\ (-4,-8)$



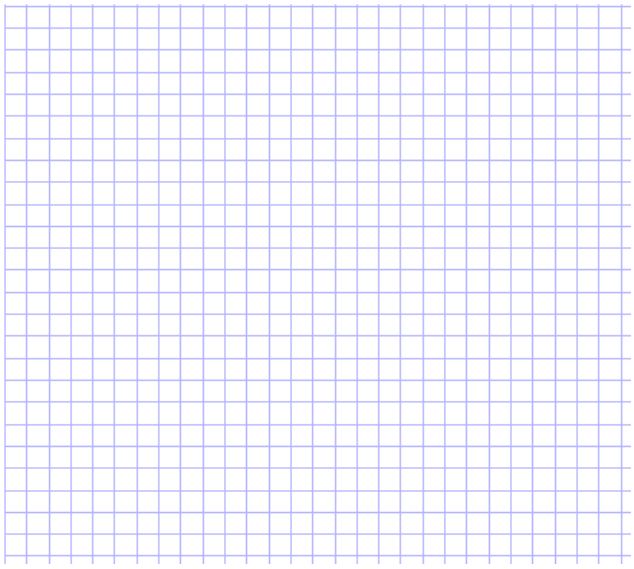
6) $(2,\ 5)\ and\ (2,13)$



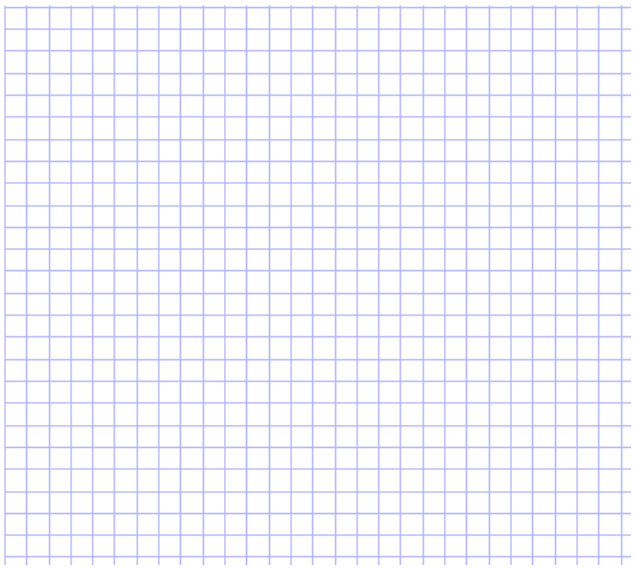
7) $(-6,-3)\ and\ (-12,-2)$



8) $(0,\ 5)\ and\ (6,0)$



9) $(-3,\ 7)\ and\ (-3, 0)$



10) $(8, -5)\ and\ (10, 10)$